

WHAT IS CLAIMED IS

1. A circuit system for data transmission between LPC devices, comprising:

a first LPC bus, connected to a first LPC device;

5 a second LPC bus, connected to a second LPC device; and

a LPC host controller, able to drive said first LPC device through said first LPC bus and said second LPC device through said second LPC bus.

10 2. The circuit system as recited in claim 1, wherein said LPC host controller further comprises an address register.

3. The circuit system as recited in claim 1, wherein said first LPC device is a master LPC device.

4. The circuit system as recited in claim 1, wherein said second LPC device is a slave LPC device.

15 5. The circuit system as recited in claim 1, wherein said first LPC bus and said second LPC bus are connected to a plurality of LPC devices, respectively.

6. A method for data transmission between LPC devices, comprising the steps of:

20 starting a first cycle through a first LPC bus by an LPC host controller, wherein a first LPC device sends a request to have a transaction with a second LPC device, and inserting a plurality of wait states after said request is received by said LPC host controller; and

25 starting a second cycle through a second LPC bus by said LPC host controller, wherein said LPC host controller has a transaction with said second LPC device according to said request from said first LPC device.

7. The method as recited in claim 6, wherein said request is a request for reading data from said second LPC device.

8. The method as recited in claim 7, further comprising the steps of:

stopping inserting said first LPC bus with wait states after said cycle on said second LPC bus is terminated; and

terminating said cycle on said first LPC bus after said LPC host
5 controller responds said first LPC device with said data from said second LPC device.

9. The method as recited in claim 6, wherein said request is a request for writing data into said second LPC device.

10. The method as recited in claim 9, further comprising the steps of:

10 stopping inserting said first LPC bus with wait states after said cycle on said second LPC bus is terminated; and

terminating said cycle on said first LPC bus.

11. A circuit system for data transmission between LPC devices,
comprising:

15 a LPC bus;

a master LPC device connected to said LPC bus;

at least one slave LPC devices connected to the LPC bus; and

a LPC host controller, able to drive said master LPC device and said slave LPC devices through said LPC bus;

20 wherein each of said LPC host controller and said master LPC device comprises an address register.

12. The circuit system as recited in claim 11, wherein each of said slave LPC devices further comprises an address register.

13. A method for data transmission between LPC devices,
25 comprising the steps of:

starting a first cycle through an LPC bus by an LPC host

controller, wherein said LPC host controller has a transaction with a master LPC device;

transmitting a request signal from said master LPC device through said LPC bus to said LPC host controller for having a transaction with at least one slave LPC devices; and

starting a second cycle through said LPC bus by said LPC host controller, wherein said LPC host controller has a transaction with said slave LPC devices according to said request from said master LPC device.

14. The method as recited in claim 13, wherein said request is a request for reading data from said slave LPC devices.

15. The method as recited in claim 14, further comprising the steps of:

recording the address of said data in an address register installed in said master LPC device so as to identify said data; and

responding an arbitrary data value after said LPC host controller has received said reading request from said master LPC device.

16. The method as recited in claim 15, further comprising a step of:

recording said address of said data in an address register installed in said LPC host controller after said LPC host controller has received said reading request from said master LPC device so as to identify said data.

17. The method as recited in claim 16, further comprising the steps of:

responding said reading request from said LPC host controller and transmitting said data from said slave LPC devices to said LPC host controller; and

monitoring said data transmitted from said slave LPC device through said LPC bus, then said master LPC device can identify and obtain said data recording to said address recorded in said address register installed in said master LPC device.

18. The method as recited in claim 13, wherein said request is a request for writing data into said slave LPC device.